



SAFER Transaction T0028D Specification

Vehicle IRP (Cab Card) Delete Output Transaction

DRAFT Version 0.1

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US Department of Transportation
Federal Motor Carrier Safety Administration
400 Seventh Street, SW
Washington, DC 20590

Prepared by:



John A. Volpe National Transportation Systems Center (Volpe Center)
55 Broadway
Cambridge, Massachusetts 02142

SAFER T0028D Vehicle IRP (Cab Card) Delete Output Transaction

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i POINTS OF CONTACT

Jingfei Wu
wu@volpe.dot.gov
(617) 494-3796

Andrew Wilson
andrew.wilson@volpe.dot.gov
(617) 374-2353

ii ACRONYMS

CVIEW	Commercial Vehicle Information Exchange Window
CVISN	Commercial Vehicle Information Systems and Networks
FTP	File Transfer Protocol
ICD	Interface Control Document
ITS	Intelligent Transportation Systems
SAFER	Safety And Fitness Electronic Records

iii References

In addition to the references listed in the SAFER 4.2 Interface Control Document and earlier ICDs, the following references are applicable to the SAFER T0022D Vehicle IRP Registration (Cab Card) Delete Transaction.

- [1] XML. The eXtensible Markup Language (XML) Version 1.0 (Second Edition) W3C Recommendation is published by the World Wide Web Consortium at <http://www.w3.org/TR/2000/REC-xml-20001006>.

1 SAFER T0028D Vehicle Registration (Cab Card) Delete Transaction

This document specifies a new transaction for the SAFER XML Interface specified in the SAFER 4.2 Interface Control Document and the SAFER 4.4 Alpha 1 Web Services Interface Control Document. This transaction is provided so that state systems can verify that delete operations sent to SAFER have been processed, and provides the interface functionality for states to perform the corresponding delete transaction on their local CVIEW database if it is so desired, in which case it would be a reversal of transaction T0028.

1.1 SAFER Delete Transactions

A SAFER Delete Transaction is distinguished from a SAFER Input Transaction by the following characteristics.

1.1.1 Transaction ID

A SAFER Delete Transaction corresponding to a SAFER Input Transaction shall have a Transaction ID of TXXXXD, where TXXXX is the Transaction ID of the Input Transaction.

1.1.2 Transaction Operation Tag

The value of the Transaction Operation Tag in the Transaction header must be the string “DELETE”.

1.1.3 Mandatory and Optional Elements

The only mandatory elements are the key values necessary to identify the data which is to be deleted. All other elements are optional for the convenience of CVIEW or equivalent systems whose owners may find it expedient to develop their delete transactions out of their existing implementations of SAFER Input Transactions.

2 T0028D, Vehicle Registration (Cab Card) Delete Output Transaction

- Root Transaction Tag: T0028D
- Interface Name: SAFER
- Interface Version: 4.02
- Transaction Version: 01.00
- Transaction Data Tag: VEHICLE_REGISTRATION

2.1 Information Transmitted

The Inspection Report Input Transaction shall consist of information defining the registration to be deleted structured within a file as follows:

Interface Header + IRP-Registration Delete Transaction Header + {IRP-VIN + IRP-Registration + {IRP-Proration} }

The only required elements are the keys necessary to identify the data to be deleted: The VIN, IRP_BASE_STATE and LICENSE_PLATE_NUMBER elements. However, SAFER will populate all fields that have data in the database for reference.

Please note that the vehicle's transponder ID shall not appear in this transaction. The transponder ID shall only be available through the electronic screening Vehicle Transponder ID Transaction to jurisdictions authorized by one or more of the vehicle's carriers to receive it.

The following information shall be provided:

The following **IRP VIN** information shall be provided:

Table 2–1. IRP VIN (Input)

Description		XML Tag
Vehicle Identification Number (VIN)	Mandatory	VIN
Title Number	Optional	TITLE_NUMBER
Title Country Code	Optional	TITLE_JURISDICTION
Title Jurisdiction Code	Optional	TITLE_JURISDICTION
Owner Name	Optional	OWNER_NAME
Model Year	Optional	MODEL_YEAR
Make	Optional	MAKE
Vehicle Use Class Code	Optional	TYPE
Model	Optional	MODEL
Power Type Code	Optional	FUEL
Unladen Weight	Optional	UNLADEN_WEIGHT
Number of Axles or Seats	Optional	NUMBER_OF_AXLES

The following **IRP Registration** information shall be provided:

Table 2–2. IRP Registration (Input)

Description		XML Tag
License Plate Number (M)	Mandatory	LICENSE_PLATE_NUMBER
License Plate Base Jurisdiction (State/Province) (M)	Mandatory	IRP_BASE_STATE
Carrier Vehicle Unit Number (O)	Optional	UNIT_NUMBER
Vehicle Last Update Date	Optional	LAST_UPDATE_DATE
Interstate / Intrastate Flag	Optional	INTERSTATE_FLAG
Vehicle Status Code	Optional	IRP_STATUS_CODE
Vehicle Status Update Date	Optional	IRP_STATUS_DATE
IRP Account Number	Optional	IRP_ACCOUNT_NUMBER
IRP Fleet Number	Optional	IRP_FLEET_NUMBER
Vehicle Registration Start Date	Optional	REGISTRATION_START_DATE
Base Vehicle Registration Expiration Date	Optional	REGISTRATION_EXPIRE_DATE
Operator's Name	Optional	OPERATOR_NAME
Safety USDOT Number	Optional	SAFETY_CARRIER
Account Owner USDOT Number	Optional	IRP_CARRIER_ID_NUMBER
IFTA Account Number (O)	Optional	IFTA_LICENSE_NUMBER
Base Jurisdiction Licensed Gross Vehicle Weight	Optional	GVW
Base Jurisdiction Licensed GVW Expiration Date	Optional	GVW_EXPIRE_DATE

The following **IRP Proration** information shall be provided:

Table 2–3. IRP Proration (Input)

Description		XML Tag
Prorate Country Code + Prorate Jurisdiction Code	Optional	IRP_JURISDICTION
Prorate Jurisdiction Prorated Gross Vehicle Weight	Optional	IRP_WEIGHT_CARRIED
Prorate Jurisdiction Prorated GVW Expiration Date	Optional	IRP_WEIGHT_EXPIRE_DATE

It is not required that any IRP Proration records exist in the transaction.

2.2 Interface Terminals

2.2.1 Source

SAFER Version 4.6

2.2.2 Destination

A state system, such as CVIEW or its equivalent.

2.3 Communication/Transmission Process

2.3.1 Format/Record Layout

Refer to the schema for this transaction in Appendix A of this document for the complete XML specification.

2.3.2 Standards and Conventions

- XML Parsers expect Unicode by default – either UTF-8 or UTF-16. Any character set other than UTF-8 or UTF-16 must be specified with the “encoding” attribute in the XML header. For example:
`<?xml version=”1.0” encoding=”US-ASCII”?>` would be used if the ASCII character set were used to encode the document.
- The File Transfer Protocol, as described in Reference 4 of the SAFER 4.2 ICD, shall be used.

2.3.3 Conditional Processing

Conditional processing is at the discretion of the state system. The LAST_UPDATE_DATE may be used to ensure the local data store is not updated with old information.

2.3.4 Data Validation

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix A.

2.3.5 Error Processing/Recovery

Records that do not conform to the schema for this transaction should not be processed, and a log entry about the error will be made.

2.3.6 Schedule/Frequency

The SAFER system shall not create a file containing transactions for this interface more than once every five minutes.

The SAFER system generally is on-line and processing transactions between the hours of 8 AM and 8 PM eastern standard or daylight savings time, seven days a week, 52 weeks per year. Outside of these hours the system is subject to discontinuities in service, due to maintenance.

2.3.7 Initiation Method

To initiate this transaction, the state system will log onto the SAFER FTP site at this URL:
ftp://CVIEWxx:****@ftp.safersys.org/T0028D

2.3.8 Synchronization/Dependencies

Files in the transaction directory are ordered by embedding a date and time stamp in the file name. The state system should process the files in the time-sequenced order.

2.3.9 Priority

The priority of this transaction is at the discretion of the state system.

2.3.10 Maximum Transaction Size

No more than 5,000 records shall exist in transaction files of type “UD” (update).

Files of type “BL” (baseline) may have hundreds of thousands of records and should, for all practical purposes, be considered unlimited. It is not expected that SAFER will be generating baseline files for T0028D.

APPENDIX A: SAFER Transaction T0028D XML Schema

The XML schema for this transaction is as follows:

```
<?xml version="1.0"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
         targetNamespace="http://www.safersys.org/namespaces/T0028DV1"
         xmlns:ts="http://www.safersys.org/namespaces/T0028DV1"
         elementFormDefault="qualified">

    <!-- IRP Registration (Cab Card) Delete Transaction, T0028, version 1 -->

    <include schemaLocation="globalTypes.xsd"/>

    <!-- Root element -->

    <element name="T0028D" type="ts:T0028DV1Type"/>

    <!-- Root element type -->

    <complexType name="T0028DV1Type">
        <sequence>
            <element name="INTERFACE" type="ts:interfaceHeaderType"/>
            <element name="TRANSACTION" type="ts:transHeaderType"/>
            <element name="IRP_REGISTRATION" type="ts:IRPRegType"
                    minOccurs="1" maxOccurs="unbounded"/>
        </sequence>
    </complexType>

    <!-- Interface Header type -->

    <complexType name="interfaceHeaderType">
        <sequence>
            <element name="NAME" type="string" fixed="SAFER"/>
            <element name="VERSION" type="string" fixed="04.02"/>
        </sequence>
    </complexType>

    <!-- Transaction Header type -->

    <complexType name="transHeaderType">
        <sequence>
            <element name="VERSION" type="string" fixed="02.00"/>
            <element name="OPERATION" type="string" fixed="REPLACE"/>
            <element name="DATE_TIME" type="dateTime"/>
            <element name="TZ" type="ts:globalTimeZoneType"/>
        </sequence>
    </complexType>

    <!-- IRP Registration type -->

    <complexType name="IRPRegType">
        <sequence>
            <element name="VIN">
                <simpleType>
                    <restriction base="string"><maxLength value="30"/></restriction>
                </simpleType>
            </element>
        </sequence>
    </complexType>
```

```
</element>
<element name="TITLE_NUMBER" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="17"/></restriction>
</simpleType>
</element>
<element name="TITLE_JURISDICTION" type="ts:T0028JurisdictionType"
minOccurs="0"/>
<element name="OWNER_NAME" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="55"/></restriction>
</simpleType>
</element>
<element name="MODEL_YEAR" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="4"/></restriction>
</simpleType>
</element>
<element name="MAKE" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="10"/></restriction>
</simpleType>
</element>
<element name="TYPE" type="ts:globalVehicleUseType" minOccurs="0"/>
<element name="MODEL" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="3"/></restriction>
</simpleType>
</element>
<element name="FUEL" type="ts:globalPowerCodeType" minOccurs="0"/>
<element name="UNLADEN_WEIGHT" minOccurs="0">
<simpleType>
<restriction base="integer"><totalDigits value="8"/></restriction>
</simpleType>
</element>
<element name="NUMBER_OF_AXLES" minOccurs="0">
<simpleType>
<restriction base="integer"><totalDigits value="2"/></restriction>
</simpleType>
</element>
<element name="LICENSE_PLATE_NUMBER">
<simpleType>
<restriction base="string"><maxLength value="12"/></restriction>
</simpleType>
</element>
<element name="IRP_BASE_COUNTRY" type="ts:globalVEHCountryType"/>
<element name="IRP_BASE_STATE" type="ts:globalJurisdictionType"/>
<element name="UNIT_NUMBER" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="20"/></restriction>
</simpleType>
</element>
<element name="LAST_UPDATE_DATE" type="ts:globalOptionalDateType" minOccurs="0"/>
<element name="INTERSTATE_FLAG" minOccurs="0">
<simpleType>
<restriction base="string">
<enumeration value="0"/> <!-- Intrastate -->
<enumeration value="1"/> <!-- Interstate -->

```

```
        </restriction>
    </simpleType>
</element>
<element name="IRP_STATUS_CODE" type="ts:globalIRPStatusCodeType"
    minOccurs="0"/>
<element name="IRP_STATUS_DATE" type="ts:globalOptionalDateType"
    minOccurs="0"/>
<element name="IRP_ACCOUNT_NUMBER" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="32"/></restriction>
    </simpleType>
</element>
<element name="IRP_FLEET_NUMBER" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="15"/></restriction>
    </simpleType>
</element>
<element name="REGISTRATION_START_DATE" type="ts:globalOptionalDateType"
    minOccurs="0"/>
<element name="REGISTRATION_EXPIRE_DATE" type="ts:globalOptionalDateType"
    minOccurs="0"/>
<element name="OPERATOR_NAME" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="55"/></restriction>
    </simpleType>
</element>
<!-- CVIS_DEFAULT_CARRIER has tag SAFETY_CARRIER --&gt;
&lt;element name="SAFETY_CARRIER" minOccurs="0"&gt;
    &lt;simpleType&gt;
        &lt;restriction base="string"&gt;&lt;maxLength value="12"/&gt;&lt;/restriction&gt;
    &lt;/simpleType&gt;
&lt;/element&gt;
&lt;element name="IRP_CARRIER_ID_NUMBER" type="ts:globalCarrierIdNumberType"
    minOccurs="0"/&gt;
&lt;element name="IFTA_LICENSE_NUMBER" minOccurs="0"&gt;
    &lt;simpleType&gt;
        &lt;restriction base="string"&gt;&lt;maxLength value="18"/&gt;&lt;/restriction&gt;
    &lt;/simpleType&gt;
&lt;/element&gt;
&lt;element name="GVW" minOccurs="0"&gt;
    &lt;simpleType&gt;
        &lt;restriction base="integer"&gt;&lt;totalDigits value="8"/&gt;&lt;/restriction&gt;
    &lt;/simpleType&gt;
&lt;/element&gt;
&lt;element name="GVW_EXPIRE_DATE" type="ts:globalOptionalDateType" minOccurs="0"/&gt;
<!-- IRP_PRORATION is optional here (but mandatory on input) --&gt;
<!-- because PRISM does not send proration info on input. --&gt;
&lt;element name="IRP_PRORATION" type="ts:IRPProrationType"
    minOccurs="0" maxOccurs="unbounded"/&gt;
&lt;/sequence&gt;
&lt;/complexType&gt;

<!-- T0028JurisdictionType type --&gt;
<!-- will be globalFullJurisdictionType if source was XML      --&gt;
<!-- will be globalJurisdictionType if source was EDI          --&gt;

&lt;simpleType name= "T0028JurisdictionType"&gt;
    &lt;restriction base="string"&gt;&lt;maxLength value="4"/&gt;&lt;/restriction&gt;</pre>
```

```
</simpleType>

<!-- IRP Proration type -->

<complexType name="IRPProrationType">
  <sequence>
    <element name="IRP_JURISDICTION" type="ts:T0028JurisdictionType"/>
    <element name="IRP_WEIGHT_CARRIED">
      <simpleType>
        <restriction base="string"><maxLength value="8"/></restriction>
      </simpleType>
    </element>
    <element name="IRP_WEIGHT_EXPIRE_DATE" type="ts:globalOptionalDateType"
           minOccurs="0"/>
  </sequence>
</complexType>

</schema>
```

APPENDIX B: Example T0028D Transaction

Please Note: The only mandatory elements in the VEHICLE_REGISTRATION element are the VIN, IRP_BASE_STATE and LICENSE_PLATE_NUMBER.

```
<?xml version="1.0"?>
<T0028D xmlns="http://www.safersys.org/namespaces/T0028DV1"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.safersys.org/namespaces/T0028DV1 T0028DV1.xsd">
  <INTERFACE>
    <NAME>SAFER</NAME>
    <VERSION>04.02</VERSION>
  </INTERFACE>
  <TRANSACTION>
    <VERSION>01.00</VERSION>
    <OPERATION>DELETE</OPERATION>
    <DATE_TIME>2002-12-10T14:05:00</DATE_TIME>
    <TZ>ED</TZ>
  </TRANSACTION>
  <IRP_REGISTRATION>
    <VIN>1FV6HLBA4YHF33774</VIN>
    <TITLE_NUMBER>ZJ1996</TITLE_NUMBER>
    <TITLE_JURISDICTION>USCT</TITLE_JURISDICTION>
    <OWNER_NAME>JOHN SMITH</OWNER_NAME>
    <MODEL_YEAR>2001</MODEL_YEAR>
    <MAKE>FORD</MAKE>
    <TYPE>TR</TYPE>
    <MODEL>001</MODEL>
    <FUEL>A</FUEL>
    <UNLADEN_WEIGHT>30000</UNLADEN_WEIGHT>
    <NUMBER_OF_AXLES>4</NUMBER_OF_AXLES>
    <LICENSE_PLATE_NUMBER>30616A</LICENSE_PLATE_NUMBER>
    <IRP_BASE_COUNTRY>US</IRP_BASE_COUNTRY>
    <IRP_BASE_STATE>WA</IRP_BASE_STATE>
    <UNIT_NUMBER>1</UNIT_NUMBER>
    <LAST_UPDATE_DATE>2002-08-15</LAST_UPDATE_DATE>
    <INTERSTATE_FLAG>1</INTERSTATE_FLAG>
    <IRP_STATUS_CODE>100</IRP_STATUS_CODE>
    <IRP_STATUS_DATE>2002-08-01</IRP_STATUS_DATE>
    <IRP_ACCOUNT_NUMBER>333333</IRP_ACCOUNT_NUMBER>
    <IRP_FLEET_NUMBER>333330</IRP_FLEET_NUMBER>
    <REGISTRATION_START_DATE>2001-08-20</REGISTRATION_START_DATE>
    <REGISTRATION_EXPIRE_DATE>2005-08-20</REGISTRATION_EXPIRE_DATE>
    <OPERATOR_NAME>TOM JAMISON</OPERATOR_NAME>
    <IRP_CARRIER_ID_NUMBER>8</IRP_CARRIER_ID_NUMBER>
    <IFTA_LICENSE_NUMBER>87598</IFTA_LICENSE_NUMBER>
    <GVW>50000</GVW>
    <GVW_EXPIRE_DATE>2005-09-16</GVW_EXPIRE_DATE>
    <IRP_PRORATION>
      <IRP_JURISDICTION>USCT</IRP_JURISDICTION>
      <IRP_WEIGHT_CARRIED>50000</IRP_WEIGHT_CARRIED>
      <IRP_WEIGHT_EXPIRE_DATE>2003-09-15</IRP_WEIGHT_EXPIRE_DATE>
    </IRP_PRORATION>
  </IRP_REGISTRATION>
</T0028D>
```

```
</IRP_REGISTRATION>
<IRP_REGISTRATION>
<VIN>321A654B987CCT</VIN>
<TITLE_NUMBER>ZJ1998</TITLE_NUMBER>
<TITLE_JURISDICTION>USCT</TITLE_JURISDICTION>
<OWNER_NAME>JOHN SMITH</OWNER_NAME>
<MODEL_YEAR>2002</MODEL_YEAR>
<MAKE>FORD</MAKE>
<TYPE>TR</TYPE>
<MODEL>001</MODEL>
<FUEL>A</FUEL>
<UNLADEN_WEIGHT>30000</UNLADEN_WEIGHT>
<NUMBER_OF_AXLES>4</NUMBER_OF_AXLES>
<LICENSE_PLATE_NUMBER>TF3003</LICENSE_PLATE_NUMBER>
<IRP_BASE_COUNTRY>US</IRP_BASE_COUNTRY>
<IRP_BASE_STATE>CT</IRP_BASE_STATE>
<UNIT_NUMBER>1</UNIT_NUMBER>
<LAST_UPDATE_DATE>2002-08-15</LAST_UPDATE_DATE>
<INTERSTATE_FLAG>1</INTERSTATE_FLAG>
<IRP_STATUS_CODE>100</IRP_STATUS_CODE>
<IRP_STATUS_DATE>2002-08-01</IRP_STATUS_DATE>
<IRP_ACCOUNT_NUMBER>333333</IRP_ACCOUNT_NUMBER>
<IRP_FLEET_NUMBER>333330</IRP_FLEET_NUMBER>
<REGISTRATION_START_DATE>2001-08-20</REGISTRATION_START_DATE>
<REGISTRATION_EXPIRE_DATE>2005-08-20</REGISTRATION_EXPIRE_DATE>
<OPERATOR_NAME>TOM JAMISON</OPERATOR_NAME>
<IRP_CARRIER_ID_NUMBER>8</IRP_CARRIER_ID_NUMBER>
<IFTA_LICENSE_NUMBER>87598</IFTA_LICENSE_NUMBER>
<GVW>50000</GVW>
<GVW_EXPIRE_DATE>2005-09-16</GVW_EXPIRE_DATE>
<IRP_PRORATION>
  <IRP_JURISDICTION>USCT</IRP_JURISDICTION>
  <IRP_WEIGHT_CARRIED>50000</IRP_WEIGHT_CARRIED>
  <IRP_WEIGHT_EXPIRE_DATE>2003-09-15</IRP_WEIGHT_EXPIRE_DATE>
</IRP_PRORATION>
</IRP_REGISTRATION>
</T0028D>
```